POPULATION ESTIMATES & PROJECTIONS

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Developing Postal Delivery Data for Use in Population Estimates

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THE OFFICE OF FINANCIAL MANAGEMENT'S (OFM) April 1 population estimates program develops estimates for local jurisdictions that are used for revenue allocations and program administration (RCW 43.62.020). Vacancy/occupancy trends are an important factor in the estimation method used. This brief (1) presents the estimation procedure, (2) reviews the circumstances that cause vacancy/occupancy rates to change, and (3) discusses the evaluation and use of postal data to adjust vacancy rates from the last U.S. census.

The present need to adjust census vacancy/occupancy rates for estimation purposes is due to the 40-year-low in mortgage interest rates. Residential construction has been flourishing, but the housing boom might not reflect population increases.

Housing Unit Estimate Method

The Housing Unit Method is used to estimate city populations. It is one of only a few methods that can be used to estimate city population because very few data sets are available for cities. OFM tracks annexations and conducts an annual survey to update city housing. A simplified version of the method is shown below:

Current City Housing X Occupancy Rate X Avg. Persons Per Occupied House = Persons in Houses

+
Current count of persons in nursing homes, correctional, other facilities = Persons in Facilities

Total City Population

OFM's annual population estimates are benchmarked to the most recent federal decennial census and use federal census data and definitions. Administrative or survey data that are used to update the variables in the formula should match to census definitions as closely as possible. Cities and towns share a set revenue fund each year. All population estimates must be as fair and as accurate as possible. Small shifts in vacancy rates and average household size in moderate to large cities have a large impact on allocations to other cities.

Factors Affecting Vacancy Rates

In a normal economy, vacancy rate fluctuations are the byproduct of the housing market seeking equilibrium. The housing market differs from other markets because there often is a noticeable lag time lag between an increase in the demand for housing and when new housing can be on the market. The lag is created by the time it takes to plan, finance, permit, and construct new housing. Causes for increased housing demand include:

- 1. Demographic changes, such as a baby boomlet cohort entering household formation age,
- 2. Increases in economic growth and jobs that attract people from elsewhere,
- 3. Suburbanization of a large metropolitan area, and
- 4. Lowering of interest rates.

Table 1. Differences between a Federal Census Housing Unit and a Postal Delivery Point

	Federal Bureau of the Census	U. S. Postal Service (USPS)
Basic definition of housing unit	A housing unit is a structure intended for permanent occupancy in which people live separately. The structure has direct access to the outside or access from a "common hall."	An active or possible residential postal delivery is assumed to represent a housing unit. A postal delivery (or stop) is an address, including post office boxes, where mail can be delivered. Addresses are classified as residential or business.
	excluded.	
2. Coverage in specific geographic area	The federal census attempts to identify and include every residential housing unit in a given geographic area. The federal census needs the geographic location of every residential living unit.	The USPS collects information on active and possible delivery addresses. Postal data do not include living structures without an address. An example would be a rental unit above a garage or in a basement that does not have a separate mail address. Post office boxes do not provide the physical location where the owners
		livé.
3. How are new units added?	The census re-counts units every ten years. In urban areas they start with an address list from post office and then check the list with a physical canvass. In rural areas they start with the physical canvass because addresses are not reliable. Many people have post office boxes.	Local jurisdictions, in agreement with the post office, submit new addresses to the post office. These units are not considered a deliverable address until there is a structure and delivery box/place.
	For estimate purposes, building permits are used to update housing.	
4. How are obsolete or fire destroyed units removed.	Houses are not removed; they are just not there to be counted. Old housing that is not weather tight is not counted. For estimates, demolition permits are used. Coverage is poor.	If there is no activity in 90 days, the USPS needs to take an action. One action is removing the delivery address from the number of active possible deliveries. It could be removed from possible deliveries. The carrier determines the action. The carrier is instrumental in reporting changes in deliveries on their routes.
5. How do counts in rural areas and for seasonal housing compare?	Rural and seasonal housing units are typically undercounted in the decennial census tabulations.	Seasonal housing is supposed to be in the master address file for the post office, but not in the residential delivery file that is used in the postal delivery statistics data. Many units in rural areas are simply
		not in the master or residential file.

Table 2. Number of Census 2000 Housing Units Compared to USPS Possible Deliveries in 2000

County	Census Housing Units 2000	USPS All Possible Deliveries 2000	USPS Possible Deliveries (No Boxes) 2000	Percent Difference All Possible USPS	Percent Difference (No Boxes)
Washington State	2,451,075	2,638,338	2,276,922	7.64	-7.11
Adams	5,773	4,725	3,063	-18.15	-46.94
Asotin	9,111	9,855	8,492	8.17	-6.79
Benton	55,963	57,868	52,880	3.40	-5.51
Chelan	30,407	32,726	22,913	7.63	-24.65
Clallam	30,683	33,653	25,061	9.68	-18.32
Clark	134,030	141,264	129,060	5.40	-3.71
Columbia	2,018	1,998	1,677	-0.99	-16.90
Cowlitz	38,624	44,503	37,159	15.22	-3.79
Douglas	12,944	12,937	10,061	-0.05	-22.27
Ferry	3,775	4,173	1,199	10.54	-68.24
Franklin	16,084	17,502	13,587	8.82	-15.52
Garfield	1,288	1,067	334	-17.16	-74.07
Grant	29,081	33,944	23,666	16.72	-18.62
Grays Harbor	32,489	36,365	22,810	11.93	-29.79
Island	32,378	29,652	23,972	-8.42	-25.96
Jefferson	14,144	16,913	12,513	19.58	-11.53
King	742,237	779,881	726,687	5.07	-2.10
Kitsap	92,644	105,695	87,480	14.09	-5.57
Kittitas	16,475	17,115	12,615	3.88	-23.43
Klickitat	8,633	12,511	5,873	44.92	-31.97
Lewis	29,585	32,688	23,161	10.49	-21.71
Lincoln	5,298	4,963	2,015	-6.32	-61.97
Mason	25,515	27,080	19,486	6.13	-23.63
Okanogan	19,085	20,014	6,956	4.87	-63.55
Pacific	13,991	13,170	5,749	-5.87	-58.91
Pend Oreille	6,608	4,243	483	-35.79	-92.69
Pierce	277,060	298,051	267,738	7.58	-3.36
San Juan	9,752	8,757	3,770	-10.20	-61.34
Skagit	42,681	43,219	37,188	1.26	-12.87
Skamania	4,576	5,048	2,470	10.31	-46.02
Snohomish	236,205	256,712	236,956	8.68	0.32
Spokane	175,005	188,677	168,467	7.81	-3.74
Stevens	17,599	22,631	15,936	28.59	-9.45
Thurston	86,652	95,075	84,328	9.72	-2.68
Wahkiakum	1,792	2,557	1,611	42.69	-10.10
Walla Walla	21,147	24,338	20,724	15.09	-2.00
Whatcom	73,893	87,408	69,630	18.29	-5.77
Whitman	16,676	19,744	14,328	18.40	-14.08
Yakima	79,174	89,224	74,432	12.69	-5.99
Average Absolute	Percent Difference	All Counties		12.58	24.51

Should a local economy experience a massive layoff by a major employer, such as the Boeing Bust of the early 1970s, the demand for housing can drop to a small fraction of boom-time levels. A sizeable portion of the existing housing, as well as new units, will be vacant. Persons and families move out of the area to other jobs or to seek work. Rental units tend to be affected sooner than owned units because most persons in rental units are more mobile and less tied to the community.

Vacancy rates can rise even during good economic boom times. Developers may finance and construct large numbers of housing units, which may exceed the demand. Or, the large number of new units transitioning from completion to being occupied will simply increase the vacancy rate.

Developing Postal Delivery Data: Federal Census Vacancy Data Versus Administrative or Survey Vacancy Data

Clearly, it is desirable to have good measures of changing vacancy rates, and such measures need to be evaluated. It is important understand the characteristics of any vacancy data so that rate changes may be appropriately applied. OFM's Research Brief No. 9 (May 2000) illustrates that real estate vacancy survey rates clearly underestimate census vacancy rates because of the characteristics of the data. Real estate surveys not only exclude smaller less marketable rental apartments with higher vacancies, but an apartment manager's concept of occupied and vacant is very different than the federal census definition of vacant. Thus, two aspects of the administrative or survey vacancy data are particularly important to evaluate: (1) the characteristics of the housing universe in the survey or indicator data, and, (2) differences in the explicit and implicit definition of vacancy. Postal data that include and exclude post office boxes are examined separately.

How well are federal census housing counts reflected by USPS delivery statistics?

One potential measure of vacancy rates and change come from the U.S. Postal Service (USPS). Postal data do not acknowledge housing structures as such—they recognize postal deliveries. Table 2 shows the difference between the counts of housing in the federal census and the number of postal deliveries. At a state level, the count of all possible residential deliveries exceeds the 2,451,075 residential units counted in the census by 7.6 percent. Residential deliveries that exclude post office boxes fall nearly 175,000 units short of the federal count, or -7.1 percent.

Postal statistics for all deliveries appear to be the best match to federal census housing counts for counties. Postal statistics excluding post office boxes fall notably short of federal census housing counts in nearly all of the counties. Counties with the largest percent differences are: Pend Oreille (92.7 percent), Garfield (74.0 percent), Ferry (68.2 percent), Okanogan (63.6 percent), Lincoln (62.0 percent), and San Juan (61.3 percent. The average absolute percent difference between the census housing counts and postal deliveries by county is 12.6 percent for all deliveries and 24.5 percent for deliveries excluding post office boxes (Table 2). Coverage is particularly poor for areas with a large number of post office box deliveries—typically the very rural areas and those counties with seasonal housing

Table 3. Comparison of Census 2000 Housing Units to USPS Possible Deliveries in 2000 for Metropolitan And Non-Metropolitan County Groupings

	Census Housing Units 2000	USPS All Deliveries 2000	USPS Deliveries (No Boxes) 2000	USPS All Deliveries % Difference	USPS Deliveries (No Boxes) % Difference
All Counties	2,451,075	2,638,338	2,276,922	7.6	-7.1
Metropolitan Non-Metropolitan	2,001,325 449,750	2,147,009 490,937	1,935,217 341,313	7.3 9.2	-3.3 -24.1

When counties are grouped by metropolitan status as a simple indicator of urban and rural character, the largest difference in coverage is for deliveries excluding post office boxes in non-metropolitan counties—nearly one of every four houses included in the census tabulations is missed (Table 3).

How well do postal delivery classifications equate with the federal census concepts of occupied and vacant?

Postal statistics do not have a distinct definition of "vacant." (See Table 4.). Postal statistics classify deliveries as "Possible" and "Active." Possible deliveries include "Active" deliveries. Thus, "Active" deliveries can be subtracted from "Possible" deliveries to obtain a residual set of "possible—but inactive" deliveries that may be loosely defined as "vacant." In other words, these are existing deliverable addresses that are not currently receiving mail.

The postal vacancy rate used in this examination is the percent "inactive possible deliveries" are of "all possible deliveries." Averaging the postal delivery data for two months smoothes the vacancy rate fluctuations. The averaged statistics for January and March are used for OFM's April 1 data point and labeled April 1. It is these postal vacancy rates that are compared to census vacancy rates in Table 5 and Figure 1.

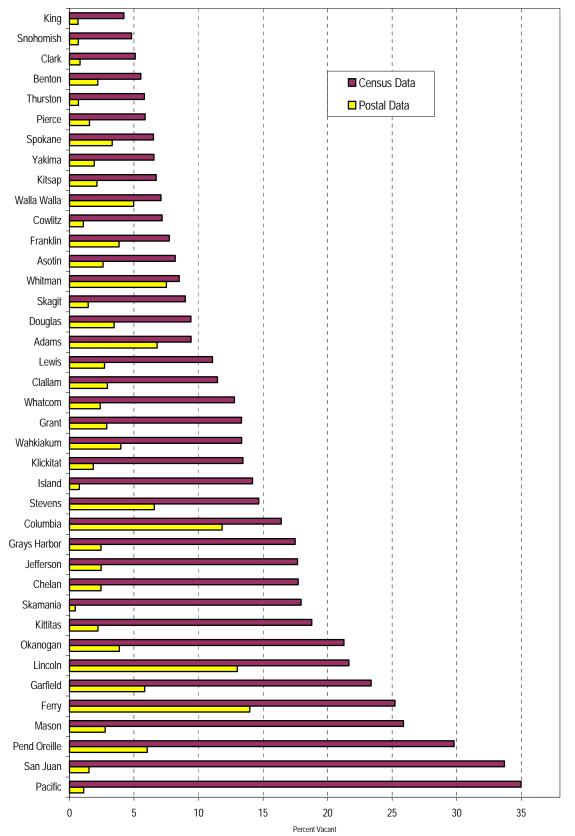
Table 4. Occupancy/Vacancy Differences in Federal Census versus Postal Delivery Data

How Vacancies are Defined by the Bureau of the Census	How Inactive Potential Deliveries are Determined by the USPS
Vacancy/occupancy status is determined as of one day that is the same for everyone. The focus is on counting every person once at a specific "usual residence" geographical location on April 1.	1. "Active Delivery" versus a possible but inactive delivery is determined on an on-going basis by the postal carriers on each route. The focus is on delivery to an address. There is no concern about delivering to a person at more than one residential address over a lengthy interval.
Temporary use housing units are considered vacant—not occupied by a usual resident	2. Units rented for temporary use by firms for contractors, consultants, employees on the road, etc. are active if they receive mail delivery.
3. The unit is vacant if no usual resident is living there.	3. A unit is occupied as long as it has mail delivery. Persons moving may "overlap" for a few months. A unit is active even after the resident has left while the mail is being forwarded.
4. The unit that is not the usual residence of a work commuter is considered vacant.	4. A commuter's work and home residence are active as long as there is mail delivery.
5. A unit under renovation is considered vacant.	5. Houses or rentals under renovation are considered active while mail is being held or forwarded to another address
6. Second or vacation homes are considered vacant.	6. Second or vacation homes are considered active if there is regular mail delivery to the unit or the mail is being held.
7. A unit that has been burned or not inhabitable because it is not weather-tight is not included in the housing base.	7. Units destroyed by fire, flood or other catastrophic causes are active while mail is being forwarded.
8. A new construction unit that is weather-tight is counted in the housing stock and considered vacant.	New construction units are excluded until mail delivery is possible

Table 5. Comparison of Census 2000 Vacancy Rates with USPS Postal Vacancy Rates in 2000 With and Without Post Office Box Deliveries

	Vacancy Rates			Difference from Census		
County	Census 2000	USPS All Deliveries 2000	USPS Deliveries (No Boxes) 2000	USPS All Deliveries	USPS Deliveries (No Boxes)	
Washington State	7.33	1.78	1.33	-5.55	-6.00	
Adams	9.42	7.30	3.92	-2.12	-5.51	
Asotin	8.20	2.62	1.08	-5.58	-7.12	
Benton	5.53	2.24	1.50	-3.30	-4.03	
Chelan	17.71	2.80	2.94	-14.91	-14.78	
Clallam	11.47	3.01	3.18	-8.46	-8.29	
Clark	5.09	0.85	0.93	-4.24	-4.16	
Columbia	16.40	13.16	8.83	-3.24	-7.58	
Cowlitz	7.18	1.06	1.20	-6.12	-5.98	
Douglas	9.41	3.52	1.80	-5.89	-7.61	
Ferry	25.22	14.19	7.42	-11.03	-17.80	
Franklin	7.73	3.96	3.20	-3.77	-4.53	
Garfield	23.37	5.34	4.79	-18.03	-18.58	
Grant	13.33	3.12	1.91	-10.21	-11.43	
Grays Harbor	17.49	3.08	1.56	-14.40	-15.93	
Island	14.19	0.88	0.53	-13.31	-13.65	
Jefferson	17.67	2.78	3.48	-14.88	-14.18	
King	4.22	0.69	0.61	-3.52	-3.61	
Kitsap	6.72	2.52	2.83	-4.20	-3.89	
Kittitas	18.77	2.61	1.86	-16.17	-16.91	
Klickitat	13.44	1.90	2.35	-11.53	-11.09	
Lewis	11.08	3.18	2.98	-7.91	-8.10	
Lincoln	21.65	13.06	7.84	-8.59	-13.81	
Mason	25.88	2.91	1.98	-22.97	-23.90	
Okanogan	21.26	4.34	3.82	-16.93	-17.44	
Pacific	34.99	1.19	1.91	-33.79	-33.07	
Pend Oreille	29.80	6.08	3.93	-23.72	-25.86	
Pierce	5.87	1.62	1.53	-4.25	-4.34	
San Juan	33.70	2.06	2.76	-31.64	-30.94	
Skagit	8.97	1.48	1.26	-7.49	-7.71	
Skamania	17.94	0.50	1.01	-17.45	-16.93	
Snohomish	4.81	0.71	0.74	-4.09	-4.07	
Spokane	6.51	3.58	2.57	-2.93	-3.94	
Stevens	14.67	6.84	3.45	-7.83	-11.22	
Thurston	5.80	0.74	0.73	-5.06	-5.07	
Wahkiakum	13.34	4.03	6.02	-9.31	-7.32	
Walla Walla	7.09	5.01	3.38	-2.08	-3.72	
Whatcom	12.78	2.43	1.52	-10.35	-11.27	
Whitman	8.51	9.15	3.17	0.64	-5.34	
Yakima	6.54	2.30	0.85	-4.24	-5.70	
Average Absolute Pe				10.6	11.19	

Figure 1. Counties Ranked by Census 2000 Vacancies Compared to Postal Delivery Vacancies



Postal data clearly understate vacancies when compared to Census Bureau vacancy rates. The percent of addresses not receiving deliveries in the postal data average 11 to 12 percentage points lower than the percent of units vacant in the federal data. This should be expected given the differences between the concepts of vacant in the two sets of data as outlined in Table 4. The largest arithmetic differences between federal census vacancy rates and postal vacancies are generally for counties with seasonal housing: Pacific (33.8 percent), San Juan (31.6 percent), Pend Oreille (23.7 percent), and Mason (23.0 percent).

Postal and census vacancy rates correspond much more closely in metropolitan areas. The average difference for metropolitan counties is about 2 percentage points—versus a 12 to 13-percentage point difference for the non-metropolitan counties.

Postal vacancy rates are generally similar for deliveries that include and exclude post office boxes. Thus, the large differences in the federal census housing counts compared to postal deliveries—particularly when post office boxes are excluded—do not necessarily result in a difference in vacancy rates. For example, in Pacific County, the federal count of housing was 13,991 compared to all postal deliveries at 13,170 and postal deliveries excluding post office boxes at only 5,749. Yet the postal delivery data show very little difference in the vacancy rates, 1.2 percent for all deliveries and 1.9 percent for deliveries excluding post office boxes.

Do postal delivery data reflect vacancy trends?

Since the 2000 federal census was conducted, declining interest rates have fostered a large surge in residential construction. In most cases, residential construction is stimulated by population gains due to a robust economy and increased demand for housing. However, the state's population gains due to migration have declined from about 60,000 in the mid 1990s to 27,000 by year 2000 and are expected to decline to 21,000 by 2003. Housing starts have increased steadily through 2002 at a national and local level.

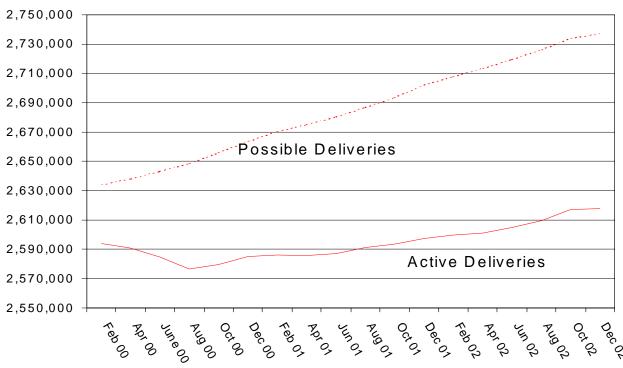


Figure 2. Possible and Active Residential Postal Deliveries

Table 6. Change in United States Postal Service Vacancy Rates

	Averaged Vacancy Rate			Change in Rate			
County	April 2000	April 2001	April 2002	2000-01	2001-02	2000-02	
Washington State	1.6454	3.2452	4.0712	1.5997	0.8261	2.4258	
Adams	6.7951	6.9983	6.8127	0.2032	-0.1856	0.0176	
Asotin	2.6085	2.9739	5.8651	0.3654	2.8912	3.2566	
Benton	2.1977	2.2738	2.9446	0.0761	0.6708	0.7469	
Chelan	2.4407	6.1770	7.5026	3.7363	1.3256	5.0619	
Clallam	2.9392	3.2275	3.9977	0.2883	0.7702	1.0584	
Clark	0.8155	1.2103	2.8706	0.3949	1.6603	2.0551	
Columbia	11.8339	14.9569	15.4637	3.1231	0.5067	3.6298	
Cowlitz	1.0767	3.0134	5.1034	1.9367	2.0899	4.0266	
Douglas	3.4647	5.1414	7.2774	1.6768	2.1359	3.8127	
Ferry	13.9672	16.6332	18.8840	2.6660	2.2508	4.9169	
Franklin	3.8477	4.4017	5.3811	0.5540	0.9794	1.5334	
Garfield	5.8243	4.5007	5.1115	-1.3236	0.6108	-0.7128	
Grant	2.8928	5.4165	7.0491	2.5237	1.6326	4.1563	
Grays Harbor	2.4428	10.9569	10.9993	8.5141	0.0424	8.5565	
Island	0.7731	4.5239	4.3349	3.7508	-0.1890	3.5618	
Jefferson	2.4575	4.6956	5.0724	2.2381	0.3768	2.6149	
King	0.6589	1.5742	2.0445	0.9152	0.4703	1.3856	
Kitsap	2.1295	3.2018	3.6826	1.0724	0.4808	1.5531	
Kittitas	2.2074	4.5933	5.5723	2.3860	0.9790	3.3649	
Klickitat	1.8429	5.6535	7.2474	3.8106	1.5939	5.4045	
Lewis	2.7090	6.4978	6.4638	3.7888	-0.0340	3.7548	
Lincoln	13.0074	15.6469	16.1359	2.6396	0.4889	3.1285	
Mason	2.7594	6.0392	8.9562	3.2799	2.9169	6.1968	
Okanogan	3.8649	7.9386	8.5413	4.0737	0.6026	4.6763	
Pacific	1.1018	2.8477	4.6438	1.7459	1.7961	3.5420	
Pend Oreille	6.0231	6.5970	10.4278	0.5739	3.8308	4.4047	
Pierce	1.5484	2.8813	3.2247	1.3328	0.3434	1.6763	
San Juan	1.5152	7.3363	7.1089	5.8210	-0.2274	5.5937	
Skagit	1.4565	4.2707	4.5940	2.8142	0.3233	3.1375	
Skamania	0.4456	2.5888	3.4957	2.1432	0.9069	3.0501	
Snohomish	0.6854	2.1113	2.8572	1.4259	0.7459	2.1717	
Spokane	3.3134	3.8285	6.0578	0.5151	2.2293	2.7443	
Stevens	6.5709	7.1766	8.0925	0.6056	0.9160	1.5216	
Thurston	0.6926	2.9131	3.2293	2.2205	0.3162	2.5367	
Wahkiakum	3.9742	7.6691	10.3379	3.6949	2.6689	6.3638	
Walla Walla	4.9669	5.8198	6.4255	0.8529	0.6057	1.4586	
Whatcom	2.3837	7.5284	8.2128	5.1447	0.6844	5.8291	
Whitman	7.5112	9.7077	11.0905	2.1965	1.3828	3.5793	
Yakima	1.9216	5.3680	6.8570	3.4464	1.4890	4.9354	

Postal delivery statistics from the United States Post Office: Address Information System (AIS), Delivery Statistics Product, April 2000 – April 2002. Vacancy rates estimates are based on active and possible residential deliveries including: Home, Curbside, Central Curbside, PO Box (contract), Neighborhood Collection Box, Residential Facility, Detached, Non-Staffed and 'Other' deliveries as defined by the USPS.

Averaging the postal statistics for two months, January and March, smoothes the change in the postal data. This average is labeled April 1 and used as The Office of Financial Management's April 1 data point.

The postal vacancy rates in Table 6 show that by 2002 all counties showed an increase in vacancies. Changes in the postal vacancy rates by county generally tend to follow what might be expected based on the economy and population growth. Postal vacancies have tended to increase in most agricultural counties and counties with

seasonal/recreational based economies. For example, Grays Harbor, Grant, Okanogan, Pend Oreille, and Yakima Counties show large increases in postal vacancies since 2000. Most of these counties had struggling economies and experienced an out movement of population. The large metropolitan Puget Sound counties, such as King, Pierce, and Snohomish tended to show minimal increases in vacancies. Increases were also minimal in the Benton-Franklin area due to a robust economy driven by energy related construction.

Table 7 shows how the change in postal vacancy rates may be used to adjust the 2000 federal census vacancy rates. In this example, the numerical percentage point change in the postal rate is used to adjust the federal census rate. Additional work is now being done to evaluate whether all or part of the postal rate change should used.

Summary and Conclusions

Postal delivery data may be a useful tool in adjusting federal census vacancy/occupancy rates for population estimation purposes. The postal statistics do show changing levels of vacancies. There is, however, a great deal of ambiguity when one tries to compare postal data to federal census housing data and housing concepts. Postal delivery points do not always equate to a housing unit at a specific physical location. Deliveries that exclude post office boxes provide a more consistent data set for census comparisons—but render the data much less suitable in terms of coverage for many counties. Counts of postal deliveries with physical addresses fall far short of federal housing counts. Moreover, postal statistics do not have a distinct definition of "vacant."

In sum, caution and understanding of postal statistics should be applied when using the postal data. In this respect, some general statements are provided below.

Residential postal deliveries are not strictly comparable to federal census housing units.

- All residential postal deliveries best match federal housing counts for all counties as a group.
- Residential postal deliveries excluding post office boxes best match to census housing counts for most metropolitan counties.
- Residential postal deliveries that exclude post office boxes are probably not appropriate for most non-metropolitan counties. This is particularly true in rural agricultural/recreational areas.

Postal statistics, in terms of inactive possible deliveries, clearly understate census vacancies.

Postal and census vacancy rates correspond much more closely in metropolitan counties—a 2 percentage point difference, than in non-metropolitan counties—a 12 to 13 percentage point difference.

Use of the postal data should be evaluated on an individual county basis. While the accuracy of housing unit estimates using the postal data is not possible to fully evaluate at this time, housing unit population estimates that include postal adjustments may be compared to other county estimates for consistency. This will be the next evaluation step in a subsequent report.

Postal Statistics Data Note: The Office of Financial Management receives postal statistics every other month. Postal data collected in mid-January are tabulated and become available in February. Postal data collected in mid-March are available in April. The data for mid-May are available in June. January and March data—that are available in February and April—were selected for evaluation because in actual estimated production all the estimates need to be final by early June.

Table 7. Change in United States Postal Service Vacancy Rates

	_	Change in USPS Vacancy Rates		Census Vacancies	Adjusted Rates	Adjusted Rates
County	2000-01	2001-02	2000-02	2000	2001	2002
	(1)	(2)	(3)	(4)	(5)=(4)-(1)	(6)=(4)-(3)
Washington State	1.5997	0.8261	2.4258	7.3305	8.9302	9.7563
Adams	0.2032	-0.1856	0.0176	9.4232	9.6263	9.4407
Asotin	0.3654	2.8912	3.2566	8.1989	8.5643	11.4555
Benton	0.0761	0.6708	0.7469	5.5340	5.6101	6.2809
Chelan	3.7363	1.3256	5.0619	17.7130	21.4493	22.7749
Clallam	0.2883	0.7702	1.0584	11.4689	11.7571	12.5273
Clark	0.3949	1.6603	2.0551	5.0899	5.4848	7.1450
Columbia	3.1231	0.5067	3.6298	16.4024	19.5255	20.0322
Cowlitz	1.9367	2.0899	4.0266	7.1821	9.1188	11.2087
Douglas	1.6768	2.1359	3.8127	9.4098	11.0865	13.2224
Ferry	2.6660	2.2508	4.9169	25.2185	27.8846	30.1354
Franklin	0.5540	0.9794	1.5334	7.7344	8.2884	9.2678
Garfield	-1.3236	0.6108	-0.7128	23.3696	22.0459	22.6568
Grant	2.5237	1.6326	4.1563	13.3317	15.8555	17.4880
Grays Harbor	8.5141	0.0424	8.5565	17.4859	26.0000	26.0424
Island	3.7508	-0.1890	3.5618	14.1886	17.9395	17.7504
Jefferson	2.2381	0.3768	2.6149	17.6683	19.9064	20.2832
King	0.9152	0.4703	1.3856	4.2198	5.1351	5.6054
Kitsap	1.0724	0.4808	1.5531	6.7225	7.7949	8.2756
Kittitas	2.3860	0.9790	3.3649	18.7739	21.1599	22.1388
Klickitat	3.8106	1.5939	5.4045	13.4368	17.2474	18.8414
Lewis	3.7888	-0.0340	3.7548	11.0833	14.8721	14.8381
Lincoln	2.6396	0.4889	3.1285	21.6497	24.2892	24.7782
Mason	3.2799	2.9169	6.1968	25.8789	29.1588	32.0757
Okanogan	4.0737	0.6026	4.6763	21.2628	25.3365	25.9391
Pacific	1.7459	1.7961	3.5420	34.9868	36.7326	38.5287
Pend Oreille	0.5739	3.8308	4.4047	29.7972	30.3711	34.2019
Pierce	1.3328	0.3434	1.6763	5.8688	7.2016	7.5450
San Juan	5.8210	-0.2274	5.5937	33.6957	39.5167	39.2893
Skagit	2.8142	0.3233	3.1375	8.9712	11.7854	12.1087
Skamania	2.1432	0.9069	3.0501	17.9414	20.0846	20.9915
Snohomish	1.4259	0.7459	2.1717	4.8064	6.2323	6.9782
Spokane	0.5151	2.2293	2.7443	6.5107	7.0258	9.2550
Stevens	0.6056	0.9160	1.5216	14.6713	15.2769	16.1929
Thurston	2.2205	0.3162	2.5367	5.8014	8.0219	8.3381
Wahkiakum	3.6949	2.6689	6.3638	13.3371	17.0320	19.7008
Walla Walla	0.8529	0.6057	1.4586	7.0932	7.9461	8.5518
Whatcom	5.1447	0.6844	5.8291	12.7847	17.9294	18.6138
Whitman	2.1965	1.3828	3.5793	8.5092	10.7058	12.0886
Yakima	3.4464	1.4890	4.9354	6.5438	9.9902	11.4792
Tanina	J.74U4	1.7030	7.3334	0.0400	∂.∂∂∪∠	11.7132

Postal 2delivery statistics from the United States Post Office: Address Information System (AIS), Delivery Statistics Product, April 2000 – April 2002. Vacancy rates estimates are based on active and possible residential deliveries including: Home, Curbside, Central Curbside, PO Box (contract), Neighborhood Collection Box, Residential Facility, Detached, Non-Staffed and 'Other' deliveries as defined by the USPS.

Averaging the postal statistics for two months, January and March smoothes the change in the postal data. This average is labeled April 1 and used as The Office of Financial Management's April 1 data point.